

## CLAIMS

What is claimed is:

- 1 1. A method comprising:  
2 receiving, from a client computer, a point-to-point request message;  
3 converting the point-to-point request message to a subject-based message;  
4 multicasting the subject-based message;  
5 receiving a response to the subject-based message;  
6 converting the response to the subject-based message to a point-to-point response  
7 message; and  
8 transmitting the point-to-point response message back to the client computer.
- 1 2. The method of claim 1, wherein the converting includes assigning a reply subject  
2 to the subject-based message.
- 1 3. The method of claim 1, wherein the point-to-point request message is based on  
2 HyperText Transfer Protocol.
- 1 4. The method of claim 1, wherein the subject-based message denotes a group of  
2 subscribers to receive the subject-based message.
- 1 5. The method of claim 4, wherein the group of subscribers to receive the subject-  
2 based message can dynamically change.
- 1 6. The method of claim 1, wherein the subject-based message is independent of an  
2 identity of a recipient.

1 7. The method of claim 1, wherein the subject-based message is independent of a  
2 protocol used by a recipient of the subject-based message.

1 8. A method for processing a point-to-point request based on HyperText Transfer  
2 Protocol (HTTP), the method comprising:  
3 receiving, from a client computer, the point-to-point request;  
4 converting the point-to-point request to a subject-based message;  
5 multicasting the subject-based message to a number of application servers across  
6 a network;  
7 receiving a response to the subject-based message from one of the number of  
8 application servers;  
9 extracting content from the response;  
10 generating a point-to-point response using the content from the response; and  
11 sending the point-to-point response back to the client computer.

1 9. The method of claim 8, wherein the converting includes assigning a reply subject  
2 to the subject-based message.

1 10. The method of claim 8, wherein the subject-based message denotes a group of  
2 subscribers to receive the subject-based message.

1 11. The method of claim 10, wherein the group of subscribers to receive the subject-  
2 based message can dynamically change.

1 12. The method of claim 10, wherein the subject-based message is independent of an  
2 identity of a recipient.

1 13. The method of claim 10, wherein the subject-based message is independent of a  
2 protocol used by a recipient of the subject-based message.

1 14. A machine-readable medium that provides instructions, which when executed by  
2 a processor, cause said processor to perform operations comprising:

3 receiving, from a client computer, a point-to-point request message;  
4 converting the point-to-point request message to a subject-based message;  
5 multicasting the subject-based message;  
6 receiving a response to the subject-based message;  
7 converting the response to the subject-based message to a point-to-point response  
8 message; and  
9 transmitting the point-to-point response message back to the client computer.

1 15. The machine-readable medium of claim 14, wherein the converting includes  
2 assigning a reply subject to the subject-based message.

1 16. The machine-readable medium of claim 14, wherein the point-to-point request  
2 message is based on HyperText Transfer Protocol.

1 17. The machine-readable medium of claim 14, wherein the subject-based message  
2 denotes a group of subscribers to receive the subject-based message.

1 18. The machine-readable medium of claim 17, wherein the group of subscribers to  
2 receive the subject-based message can dynamically change.

1 19. The machine-readable medium of claim 14, wherein the subject-based message is  
2 independent of an identity of a recipient.

1 20. The machine-readable medium of claim 14, wherein the subject-based message is  
2 independent of a protocol used by a recipient of the subject-based message.

1 21. A machine-readable medium that provides instructions for processing a point-to-  
2 point request based on HyperText Transfer Protocol (HTTP, which when executed by a  
3 processor, cause said processor to perform operations comprising:

4 receiving, from a client computer, the point-to-point request;  
5 converting the point-to-point request to a subject-based message;  
6 multicasting the subject-based message to a number of application servers across  
7 a network;

8 receiving a response to the subject-based message from one of the number of  
9 application servers;

10 extracting content from the response;  
11 generating a point-to-point response using the content from the response; and  
12 sending the point-to-point response back to the client computer.

1 22. The machine-readable medium of claim 21, wherein the converting includes  
2 assigning a reply subject to the subject-based message.

1 23. The machine-readable medium of claim 21, wherein the subject-based message  
2 denotes a group of subscribers to receive the subject-based message.

1 24. The machine-readable medium of claim 23, wherein the group of subscribers to  
2 receive the subject-based message can dynamically change.

1 25. The machine-readable medium of claim 21, wherein the subject-based message is  
2 independent of an identity of a recipient.

1 26. The machine-readable medium of claim 21, wherein the subject-based message is  
2 independent of a protocol used by a recipient of the subject-based message.

1 27. An application server coupled to a network, the application server comprising:  
2 a database having data;  
3 a processor coupled to the database, the processor to process subject-based  
4 messages received from a server, the subject-based messages to include requests for  
5 data content wherein the subject-based messages are generated from point-to-point  
6 messages received from a client computer, the processing including:  
7 listening for a subject-based request message being received from the  
8 network;  
9 extracting portions of the data in the database based on the request in the  
10 subject-based message;  
11 generating a subject-based response message that includes the portions of  
12 the data extracted from the database; and  
13 transmitting the subject-based response message back to the server.

1 28. The application server of claim 27, wherein the point-to-point request message is  
2 based on HyperText Transfer Protocol.

1 29. The application server of claim 27, wherein the subject-based response message  
2 includes a reply subject assigned by the server.

1 30. The application server of claim 27, wherein the subject-based message is  
2 independent of an identity of a recipient.

1 31. The application server of claim 27, wherein the subject-based message is  
2 independent of a protocol used by a recipient of the subject-based message.

1 32. A system comprising:  
2 a server coupled to a network, the server to receive a point-to-point request  
3 message based on HyperText Transfer Protocol (HTTP) from a web browser and to  
4 process the point-to-point request message, the processing of the point-to-point request  
5 message including:  
6 converting the point-to-point request message to a subject-based message;  
7 multicasting the subject-based message;  
8 receiving a response to the subject-based message;  
9 converting the subject-based message to a point-to-point response  
10 message; and  
11 transmitting the point-to-point response message back to the web browser;  
12 and  
13 a number of application servers coupled to the network, each of the number of  
14 application servers comprising:  
15 a database having data;

16 a processor coupled to the database, the processor to process the subject-  
17 based message received from the server, the processing of the subject-based message  
18 including:  
19 listening for a subject-based request message being received from  
20 the network;  
21 extracting portions of the data in the database based on the request  
22 in the subject-based message;  
23 generating a subject-based response message that includes the  
24 portions of the data extracted from the database; and  
25 transmitting the subject-based response message back to the server.

1 33. The system of claim 32, further comprising a distributed queue, the distributed  
2 queue to receive the subject-based message from the server, wherein one of the number  
3 of application servers schedules which of the application servers are to process the  
4 subject-based message received in the distributed queue.

1 34. The system of claim 32, wherein the number of application servers can  
2 dynamically change.

1 35. The system of claim 32, wherein the subject-based message is independent of a  
2 protocol used by the number of application servers.